

04/29/25

ABSTRACT OF THE DISCLOSURE

The present invention relates in general to multidrug resistance (MDR) in cells. In particular, the present invention relates to the identification of a new member of the MDR gene family, P-40, as well as to the identification of P-40 related genes (homologs) as being additional members of the MDR gene family. The present invention therefore relates to nucleic acid molecules encoding P-40 protein and P-40 protein homologs, to multidrug resistant cells containing these nucleic acid molecules; to hybridomas containing antibodies to P-40 and P-40 homologs; to nucleic acid probes for the detection of these nucleic acid molecules; to a method of detection of such nucleic acid molecules or of the P-40 protein or P-40 homologs; to bioassays comprising the nucleic acid molecules encoding P-40 or P-40 homologs, P-40 protein or P-40 protein homologs, or antibodies of the present invention to diagnose, assess or prognose MDR in an animal; to therapeutic uses of the nucleic acid molecules of the present invention; and to methods of preventing MDR in an animal.